in a single prior art reference," citing <u>Verdegaal Bros. v. Union Oil Co. of California</u>, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the "identical invention . . . in as complete detail as is contained in the . . . claim," citing <u>Richardson v. Suzuki Motor Co.</u>, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). For the reasons identified below, Applicants submit that the Examiner has failed to establish anticipation of at least independent claims 1, 12, 25 and 26 by the Kasslin reference.

Independent claim 1 is directed to a method of controlling a terminal in a communication system. The method includes the following steps, which are denoted as (a) and (b) herein for ease of discussion:

> (a) generating a command symbol representative of a plurality of commands in accordance with a terminal protocol supported by a switch of the system; and
>
> (b) transmitting the command symbol to a terminal having a valid command space which is less than a full command space of the terminal protocol, wherein the terminal decodes the symbol and executes the corresponding plurality of commands.

The following portion of the specification at page 1, lines 11-23, with emphasis supplied, indicates that in conventional arrangements, use of a complex multi-octet terminal protocol to control a system terminal presents a number of significant problems:

> Communication system switches frequently deploy multifunction voice or voice-and-data terminals which generally require a complex multi-octet terminal protocol to drive the terminal interface and to control transport services. Such a multi-octet protocol is typically field oriented, and may include, e.g., a header field, a command pointer field, a command data field interpreted according to the contents of the command pointer, and an integrity check field. Each field is usually defined as a collection of one or more bits, and certain bits or collections of bits are dedicated to certain functions. This creates fixed relationships between bits and command interpretations. In addition, the deskset terminal design is such that a large number of bits are assigned or reserved for numerous feature keys

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and feature indicator controls. <u>When such a system is upgraded to support wireless terminals, use of the existing wired terminal protocol is desirable from a switch software point of view, since re-use of the protocol is generally a low-cost implementation. Unfortunately, this conventional approach requires excessive bandwidth, and fails to optimize the control protocol for the wireless voice terminal.</u>

The present invention as set forth in independent claim 1 solves these problems of the prior art by providing a symbol-based approach which allows a system terminal to operate using a valid command space which is less than a full command space of the terminal protocol. More specifically, in step (a) a command symbol is generated that is representative of a plurality of commands in accordance with a terminal protocol supported by a switch of the system, and in step (b), the command symbol is transmitted to a terminal having a valid command space which is less than a full command space of the terminal protocol. The terminal decodes the symbol and executes the corresponding plurality of commands, thereby conserving bandwidth and providing other advantages.

These advantages in an illustrative embodiment are more particularly described as follows at page 3, lines 6-14, of the specification, with emphasis supplied:

The above-described illustrative embodiment of the invention significantly reduces the command field associated with supporting the operation of a wireless terminal using an existing wired terminal protocol. <u>This results in a proportional bandwidth consumption reduction when communicating over wireless communication channels, thereby preserving this scarce resource.</u> The full functionality of the system, as expressed by the wired terminal protocol, is made available to the wireless terminal to the extent implementable in that terminal. In addition, there is no need to subject the command symbols to bitwise encryption, since their field mapping conventions in accordance with the wired terminal protocol are eliminated during the symbol generation process of the invention.

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The present invention as claimed thus provides significant advantages over the prior art. As will be described below, the claimed arrangements, and their associated advantages, are not taught or suggested by the Kasslin reference.

The Examiner argues that each of claims 1-26 is anticipated by the Kasslin reference. Applicants respectfully disagree.

With regard to independent claim 1, the Examiner asserts that the generation of a DAB packet representative of a plurality of ATM cells in FIG. 4A of Kasslin meets the limitations of step (a) above. Applicants believe that the Examiner is misinterpreting the Kasslin reference on this point. Step (a) calls for generating a command symbol representative of a plurality of commands in accordance with a terminal protocol. There is no particular command symbol that is representative of a plurality of commands in FIG. 4A. To the extent the data in the DAB packet may be viewed as representing a plurality of commands, it is simply the commands themselves that are assembled into the packet. There is no separate generation of a command symbol representative of a plurality of commands.

The Examiner further argues that a mobile terminal in the mobile radio network of FIG. 6 in Kasslin has a valid command space which is less than a full command space of the terminal protocol associated with the plurality of commands, and that this terminal decodes a command symbol and executes a corresponding plurality of commands represented by the command symbol, as required in step (b) of claim 1. However, there is no teaching or suggestion within Kasslin to the effect that any particular mobile terminal in the mobile radio network of FIG. 6 has a valid command space which is less that the full command space associated with the information in the DAB packet of FIG. 4A. To the contrary, the reference suggests that the command space of the mobile terminal will be exactly the same as the command space associated with the DAB packet of FIG. 4A, since it will generally be desirable in the Kasslin system for the mobile terminal to be able to utilize any command that may be assembled into the DAB packet of FIG. 4A.

Moreover, Applicants note that by failing to meet the limitations of steps (a) and (b) of claim 1, the Kasslin system does not provide the previously-described significant advantages associated with the claimed invention, such as a reduction in the amount of system bandwidth consumed by commands directed from a switch to a system terminal.

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In summary, there are limitations in independent claim 1 that are clearly not taught or suggested by the Kasslin reference. The §102(a) rejection of claim 1 is therefore believed to be improper and should be withdrawn.

Independent claims 12, 25 and 26 include limitations similar to those of claim 1, and are believed allowable for substantially the same reasons that claim 1 is believed allowable.

Dependent claims 2-11 and 13-24 are believed allowable for at least the reasons identified above with regard to their respective independent claims. Moreover, one or more of these claims is believed to define additional patentable subject matter over the Kasslin reference.

For example, dependent claims 3 and 14 each include limitations specifying that a set of command symbols is generated by (i) resizing a command space associated with the wired terminal protocol to generate a reduced command space suitable for use with the wireless terminal, (ii) generating a representation in which a first portion of the reduced command space is correlated with a second portion of the reduced command space, and (iii) assigning command symbols to valid entries in the representation, such that a given one of the command symbols uniquely identifies a particular set of commands in the reduced command space. The Examiner in formulating the rejection of claims 3 and 14 completely ignores these limitations, and fails to indicate the manner in which the Kasslin reference is alleged to meet these limitations.

As another example, dependent claims 9 and 20 each include limitations specifying that the representation referred to in claims 3 and 14, respectively, is generated by forming a tabular representation in which specific values of bits in the first portion of the reduced command space correspond to columns, and in which specific values of bits in the second portion of the reduced command space correspond to rows. Again, the Examiner completely ignores these limitations, and fails to identify any particular teachings from the Kasslin reference which are alleged to meet the limitations in question.

For at least the above reasons, Applicants respectfully submit that claims 1-26 are patentable over Kasslin. Accordingly, withdrawal of the rejection to claims 1-26 under §102(a) is therefore respectfully requested.

Respectfully submitted,

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